



AUSTENITIC STAINLESS STEEL ACX 216	
EN DESIGNATION	AISI DESIGNATION
1.4307	304L
X2CrNi18-9	



**DESCRIPTION** | ACX 216 belongs to the range of austenitic Cr-Ni steels. These steels are the most versatile steels on the market making them suitable for a multitude of applications. These steels combine good corrosion resistance in a wide range of environments with outstanding mechanical properties. ACX 216, due to its low carbon content, is less susceptible to intergranular corrosion in welds than ACX 125.

**CHEMICAL COMPOSITION**

C	Si	Mn	P	S	N(ppm)	Cr	Cu	Mo	Ni	Ti
≤0.03	≤0.75	≤2.00	≤0.045	≤0.030	≤1000	18.00-20.00	-	-	8.00-10.00	-

**APPLICATIONS**

- Pipes
- Boiler making
- Chemical industry
- Cryogenic applications

**MECHANICAL PROPERTIES  
EN10088-3**

	Rp <sub>0,2</sub> (MPa)	Rm (MPa)	Elongation (%)	Hardness (HB)
Wire rod	≥175	500-700	≥45	≤215
Bar	≥175	500-930	≥25	-

**PHYSICAL PROPERTIES  
EN 10088-1**

Elastic modulus	Thermal expansion average coefficient (20°C-100°C)	Thermal conductivity	Electrical resistivity	Density
200 Gpa	16 μm/m°C	15 W/m·k	0.73 Ω·mm <sup>2</sup> /m	7.9 kg/dm <sup>3</sup>

**WELDING**

The consumables recommended are the following:

Covered electrodes	Wires and rods	Hollow electrodes
E 19 9 Nb	G 19 9 L (GMAW) W 19 9 L (GTAW) P 19 9 L (PAW) S 19 9 L (SAW)	T 19 9 L
308L	308L	308L

**INTERGRANULAR CORROSION**

ACX 216, due to its low C content (≤ 0.03%), is less susceptible to intergranular corrosion than ACX 125.

**CORROSION RESISTANCE**

The austenitic stainless steels of the Cr-Ni family provide good corrosion resistance performance in a large number of applications. As an example, these steels present corrosion rates below 0.10 mm/year in the following environments:

- Acetic acid at 20% at 80°C.
- Formic acid at 90% at 20°C.
- 20% phosphoric acid at 60°C.
- Nitric acid at 20% at 50°C.
- 90% sulphuric acid at 20°C



ACX 216 | AUSTENITIC STAINLESS STEEL



SPECIFICATIONS | Can be supplied in accordance with the requirements of standards 10088-3 and ASTM/ASME A/SA-276 "Condition: Annealed".

CERTIFICACIONES



Sistema de Gestión  
 ISO 9001:2015  
 ISO 14001:2015  
 ISO 50001:2018



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